

Section 55 Steel Structures

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4-5501 General

Section 55, “Steel Structures,” of the *Standard Specifications* includes specifications for constructing steel structures. For additional information regarding steel structures, see Section 170, “Structural Steel,” and Section 180, “Welding,” of the *Bridge Construction Records and Procedures Manual*.

4-5501 General

4-5502 Before Work Begins

The contractor must submit for approval working drawings for structural steel in accordance with Section 5-1.02, “Plans and Working Drawings,” of the *Standard Specifications*. The working drawings are submitted directly to the Office of Structure Design, documents unit. The review of the working drawings is a coordinated effort between the Office of Structure Design, Office of Materials Engineering and Testing Services (METS), and the Office of Structure Construction. The Office of Structure Design has the primary responsibility for approving the working drawings.

4-5502 Before Work Begins

If any welding must be performed, the contractor must submit a quality control plan for the work. For guidelines in approving the submittal, refer to Section 180, “Welding,” of the *Bridge Construction Records and Procedures Manual*.

The resident engineer must also verify the receipt and proper distribution of Form CEM-3101, “Notice of Materials to Be Used,” which lists structural steel materials.

4-5503 During the Course of Work

During the work, take the following steps:

- Verify that METS has inspected and released structural steel and fastener assemblies by retrieving Form TL-0624, “Inspection Release Tag,” as the assemblies are delivered to the site and by matching the assemblies to Form TL-0029, “Report of Inspection of Material.”
- Ensure the contractor performs installation tension tests and rotational capacity tests on all lots of fastener assemblies just before their use. To keep track of the location of fastener assembly placement and to protect the assemblies from the weather, ensure the contractor stores the fastener assemblies in their original containers and out of the elements.
- Witness the contractor’s verification of minimum tension as required by the specifications. Record the data in the project files.
- For guidelines for welded connections, refer to Section 180, “Welding,” of the *Bridge Construction Records and Procedures Manual*.
- After the completion of the work for each structure, the contractor must submit corrected working drawings to the resident engineer for transmittal to the Office of Structure Design, documents unit. Remind the contractor that final acceptance of the contract will not be made until the corrected drawings have been submitted.

4-5503 During the Course of Work

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| 4-5504 | 4-5504 Measurement and Payment |
| Measurement and Payment | Refer to the appropriate sections of the special provisions and <i>Standard Specifications</i> for the basis of measurement and payment. |